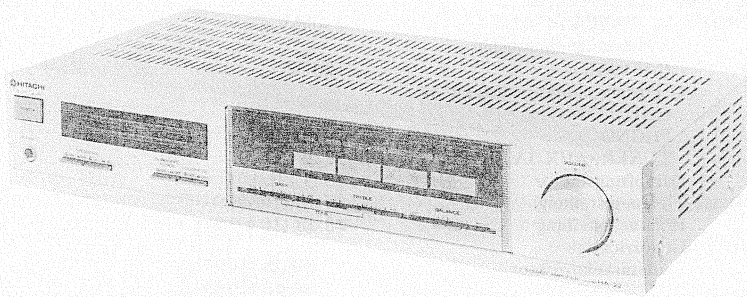
HITACHI
SERVICE MANUAL

TY | No. 319 EGF

HA-22



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SAFETY PRECAUTIONS

The following precautions should be observed when servicing.

1. Since many parts in the unit have special safety related characteristics, always use genuine Hitachi's replacement parts. Especially critical parts in the power circuit block should not be replaced with other makers.
   Critical parts are marked with ⚠ in the schematic diagram and circuit board diagram.
2. Before returning a repaired unit to the customer, the service technician must thoroughly test the unit to ascertain that it is completely safe to operate without danger of electrical shock.

SPECIFICATIONS

Power output (Both channels driven)	30 watts + 30 watts* min. RMS, at 8 ohms from 40 Hz to 20 kHz, with no more than 0.1% total harmonic distortion.
	30 W + 30 W (8 ohms, 1 kHz, T.H.D. 0.1% SINUS)
	35 W/ch + 35 W/ch (8 ohms, 40 – 20 kHz, T.H.D., 0.1%)
Power bandwidth	10 Hz – 30 kHz (8 ohms, T.H.D. 0.1% 1/2 Rated)
Frequency characteristics	
TUNER, AUX/TV, TAPE	20 Hz – 40 kHz (+1.0 – 3.0 dB)
PHONO	RIAA ± 0.5 dB
Harmonic distortion	
(at rated output)	Less than 0.1%
(at 1/2 rated output)	Less than 0.1%
Intermodulation distortion (at 1/2 rated output)	Less than 0.1%
Input sensitivity/Impedance	
PHONO	2.7 mV/47 k-ohms
TUNER, AUX/TV	160 mV/40 k-ohms
TAPE PLAY	160 mV/40 k-ohms
Output level	
TAPE REC OUT	150 mV
Phono overload level (at 1 kHz)	120 mV
Signal-to-noise ratio (IHF, A network)	
PHONO	72 dB
TUNER, AUX/TV, TAPE	93 dB
Damping factor	20 (1 kHz)
Bass control	±8 dB (100 Hz)
Treble control	±8 dB (10 kHz)
Loudness control	+6 dB (100 Hz)
	+4 dB (10 kHz)
Subsonic filter	20 Hz
Power supply	AC 120 V 60 Hz, ~220 V 50/60 Hz, ~240 V 50/60 Hz or ~120 V/220 V/240 V 50/60 Hz
Power consumption	70 W (at 1/10 rated output)
	110 W (at 1/3 rated output)
	180 W (at rated output)
Dimensions	435 (W) x 83 (H) x 235 (D) mm
Weight	4.8 kg

*Measured pursuant to the Federal Trade Commission's Trade Regulation Rule on Power Output Claims for Amplifiers.

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.

STEREO AMPLIFIER

April 1982 TOYOKAWA WORKS

SICHERHEITSMASSNAHMEN

Bei Wartungsarbeiten sind die folgend Sicherheitsmaßnahmen zu beachten:

1. Da verschiedene Teile dieses Gerätes Sicherheitsfunktionen aufweisen, nur Original-Hitachi-Ersatzteile verwenden. Kritische Teile im Netzteil sollten nicht durch ähnliche Teile anderer Hersteller ersetzt werden. Alle kritischen Teile sind im Schaltplan und im Diagramm der Schaltplantinen mit dem Symbol ⚠ gekennzeichnet.
2. Vor der Auslieferung eines reparierten Gerätes an den Kunden muß der Wartungstechniker das Gerät einer gründlichen Prüfung unterziehen, um sicherzustellen, daß sicherer Betrieb ohne die Gefahr von elektrischen Schlägen gewährleistet ist.

TECHNISCHE DATEN

Ausgangsleistung	30 Watt/Kanal + 30 Watt/Kanal (beide Kanäle ausgesteuert an 8 Ohm, 40 Hz – 20 kHz, T.H.D., 0,1%)
DIN 4/8 Ohm	30 Watt/Kanal + 30 Watt/Kanal (8 Ohm, 1 kHz, T.H.D. 0,1% SINUS)
	35 Watt/Kanal + 35 Watt/Kanal (8 Ohm, 40 – 20 kHz, T.H.D. 0,1%)
Leistungsbandbreite	10 Hz – 30 kHz (an 8 Ohm, Klirrgrad 0,1%, halbe Nennleistung)
Frequenzcharakteristik	
TUNER, AUX/TV, TAPE	20 Hz – 40 kHz (+1,0 – 3,0 dB)
PHONO	RIAA-Kennlinie ±0,5 dB
Klirrfaktor	
(bei Nennleistung)	Kleiner als 0,1%
(bei halber Nennleistung)	Kleiner als 0,1%
Intermodulations-Verzerung	
(bei halber Nennleistung)	Kleiner als 0,1%
Eingangsempfindlichkeit/Impedanz	
PHONO	2,7 mV/47 kOhm
TUNER, AUX/TV	160 mV/40 kOhm
TAPE PLAY	160 mV/40 kOhm
Ausgangspegel	
TAPE REC OUT	150 mV
Phonoüberlastungspegel	
(bei 1 kHz)	120 mV
Geräuschspannungsabstand	
(IHF, A-Nets)	
PHONO	72 dB
TUNER, AUX/TV, TAPE	93 dB
Dämpfungsfaktor	20 (1 kHz)
Tiefeneinstellung	±8 dB (100 Hz)
Höheneinstellung	±8 dB (10 kHz)
Gehörrichtige	
Lautstärkekorrektur	+6 dB (100 Hz)
	+4 dB (10 kHz)
Subsonicfilter-Schalter	20 Hz
Netzspannung	Wechselstrom 120 V 60 Hz, ~220 V 50/60 Hz, ~240 V 50/60 Hz oder ~120 V/220 V/240 V 50/60 Hz
Leistungsaufnahme	70 W (bei 1/10 Nennleistung)
	110 W (bei 1/3 Nennleistung)
	180 W (bei Nennleistung)
Abmessungen	435 (B) x 83 (H) x 235 (T) mm
Gewicht	4,8 kg

Änderungen der Konstruktion und technischen Daten bleiben im Sinne der ständigen Verbesserung vorbehalten.

PRÉCAUTIONS DE SÉCURITÉ

Les précautions suivantes doivent être observées chaque fois qu'une réparation doit être faite.

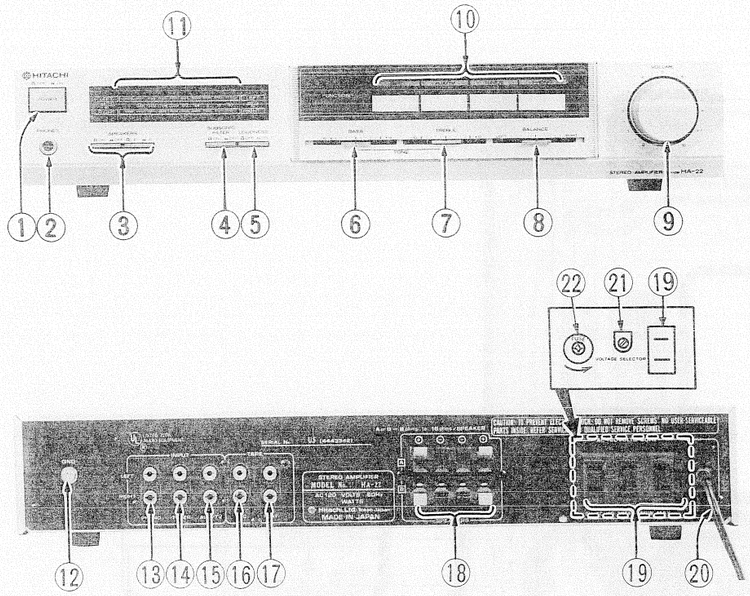
1. Etant donné que de nombreux composants de l'appareil possèdent des caractéristiques relatives à la sécurité, utiliser uniquement des pièces de rechange d'origine Hitachi pour effectuer un remplacement. Ceci se rapporte notamment aux pièces critiques du bloc d'alimentation qui ne doivent en aucun cas être remplacées par celles d'autres fabricants. Les pièces critiques sont accompagnés du symbole ⚠ dans le schéma de montage et sur le schéma de plaque de câblage.
2. Avant de retourner l'appareil réparé au client, le technicien doit procéder à un essai complet pour s'assurer qu'il ne présente aucun danger de chocs électriques.

CARACTERISTIQUES TECHNIQUES

Puissance de sortie	30 W/can. +30 W/can. (deux canaux en fonction sous 8 ohms, 40 – 20 kHz, D.H.T. 0,1%)
	30 W/can. +30 W/can. (8 ohms, 1 kHz, D.H.T. 0,1% SINUS)
	35 W/can. + 35 W/can. (8 ohms, 40 – 20 kHz, D.H.T. 0,1%)
Bande passante	10 Hz – 30 kHz (8 ohms, D.H.T. 0,1% 1/2 de la puissance nominale)
Caractéristiques de fréquence	
TUNER, AUX/TV, TAPE	20 Hz – 40 kHz (+1,0 – 3,0 dB)
PHONO	RIAA ± 0,5 dB
Distorsion harmonique	
(à la puissance nominale)	Inférieure à 0,1%
(à la moitié de la puissance nominale)	Inférieure à 0,1%
Distorsion d'intermodulation	
(à la moitié de la puissance nominale)	Inférieure à 0,1%
Sensibilité d'entrée/Impédance	
PHONO	2,7 mV/47 k-ohms
TUNER, AUX/TV	160 mV/40 k-ohms
TAPE PLAY	160 mV/40 k-ohms
Niveau de sortie	
TAPE REC OUT	150 mV
Niveau de surcharge phono	
(à 1 kHz)	120 mV
Rapport signal/bruit	
(IHF, réseau A)	
PHONO	72 dB
TUNER, AUX/TV, TAPE	93 dB
Facteur d'amortissement	20 (1 kHz)
Réglage de graves	±8 dB (100 Hz)
Réglage des aiguës	±8 dB (10 kHz)
Correction physiologique	+6 dB (100 Hz)
	+4 dB (10 kHz)
Filtre subsonique	20 Hz
Alimentation	CA 120 V 60 Hz, ~220 V 50/60 Hz, ~240 V 50/60 Hz ou ~120 V/220 V/240 V 50/60 Hz
Consommation	70 W (à 1/10 de la puissance nominale)
	110 W (à 1/3 de la puissance nominale)
	180 W (à la puissance nominale)
Dimensions	435 (L) x 83 (H) x 235 (P) mm
Poids	4,8 kg

Les caractéristiques techniques et la présentation peuvent être modifiées sans préavis pour des raisons d'amélioration.

FRONT AND REAR PANEL·
VORDERE UND HINTERE BEDIENUNGSTAFEL·
PANNEAUX AVANT ET ARRIERE

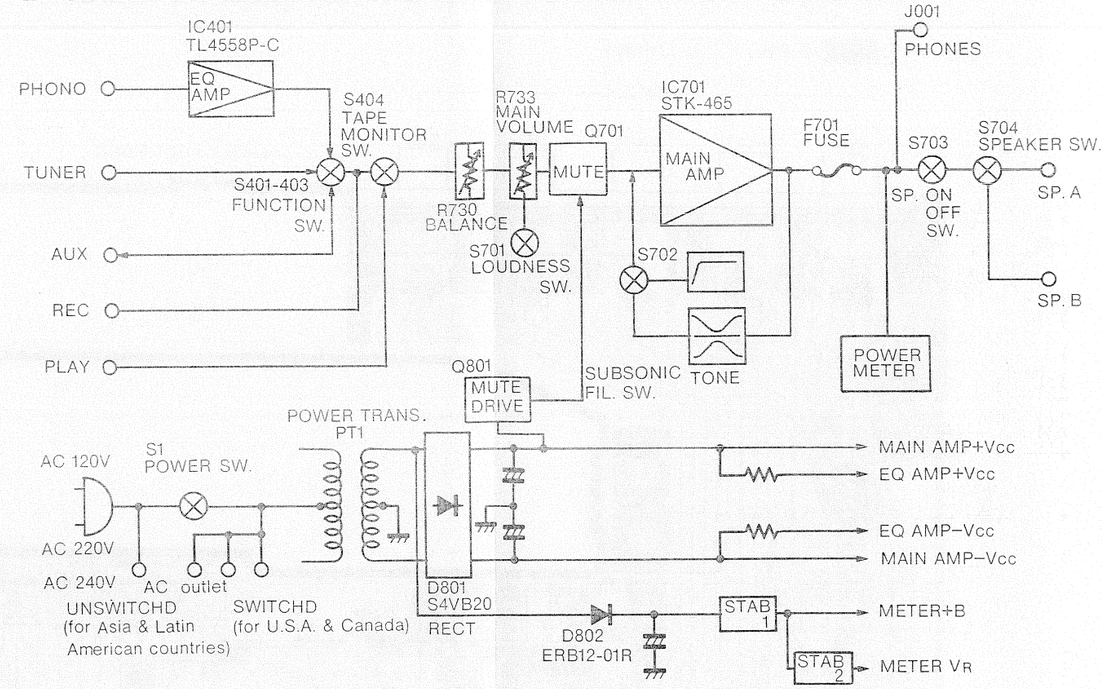


① POWER switch
② PHONES jack
③ SPEAKERS switches
④ SUBSONIC FILTER switch
⑤ LOUDNESS switch
⑥ BASS control
⑦ TREBLE control
⑧ BALANCE control
⑨ VOLUME control
⑩ FUNCTION switches
⑪ Power level meter
⑫ Ground terminal (GND)
⑬ PHONO INPUT jacks
⑭ TUNER INPUT jacks
⑮ AUX/TV jacks
⑯ TAPE REC jacks
⑰ TAPE PLAY jacks
⑱ SPEAKERS terminals
⑲ AC outlet
(3 outlets for U.S.A. & Canada sets,
1 outlet for Asia & Latin American countries sets)
⑳ Power supply cord
㉑ VOLTAGE SELECTOR
(for Asia and Latin American countries)
㉒ FUSE holder
(for Asia and Latin American countries)

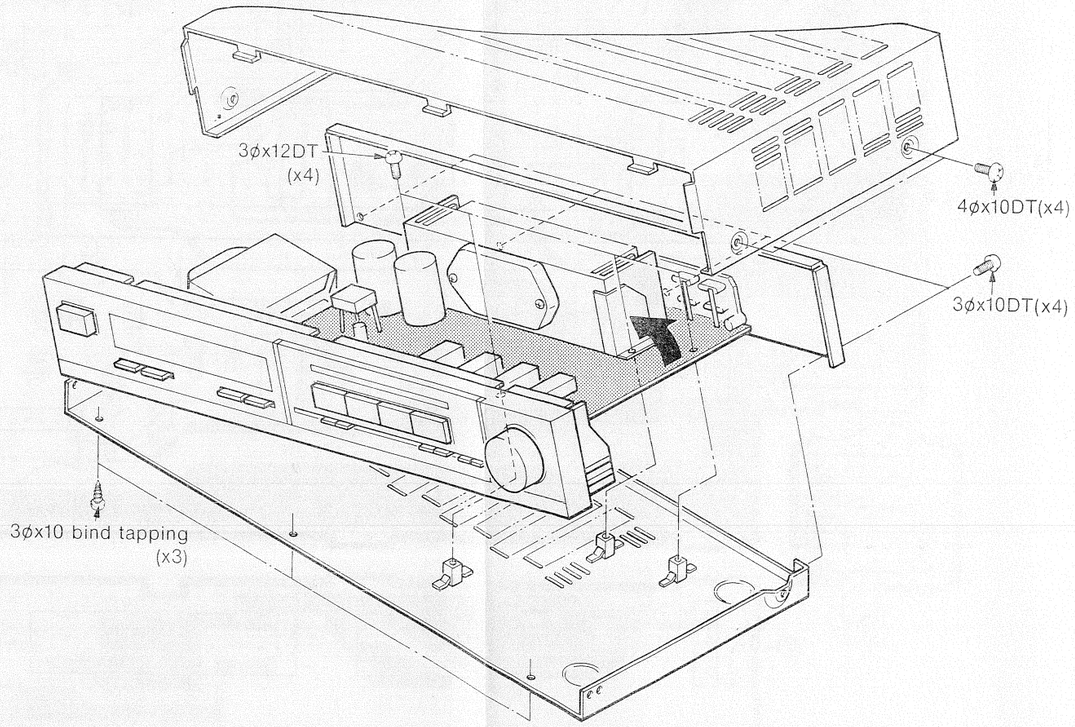
① Netzschalter (POWER)
② Kopfhörer-Buchse (PHONES)
③ Lautsprecherschalter bass (SPEAKERS)
④ SUBSONIC-FILTER-Schalter
⑤ Schalter für gehorrichtige Klangkorrektur (LOUDNESS)
⑥ BASS-Regler
⑦ Höhenregler (TREBLE)
⑧ BALANCE-Regler
⑨ Lautstärkeregler (VOLUME)
⑩ Funktionsschalter (FUNCTION)
⑪ Leistungspegelmesser
⑫ Erdung (GND)
⑬ PHONO-Eingangsbuchse (PHONO INPUT)
⑭ Tuner-Eingangsbuchse (TUNER INPUT)
⑮ AUX/TV-Eingangsbuchse (AUX/TV)
⑯ Bandaufnahmebuchsen (TAPE REC)
⑰ Bandwiedergabebuchsen (TAPE PLAY)
⑱ Lautsprecher-Klemmen (SPEAKERS)
⑲ Kaltgerate-Steckdose (drei Steckdosen bei für USA und Kanada bestimmten Modellen; eine Steckdose bei für Asien und Lateinamerika bestimmten Módellen)
⑳ Netzkabel
㉑ Netzspannungswähler (VOLTAGE SELECTOR)
(für Asien und Lateinamerika)
㉒ Halter für Sicherung (FUSE)
(für Asien und Lateinamerika)

① Interrupteur d'alimentation (POWER)
② Prise de casque (PHONES)
③ Commutateur d'enceintes (SPEAKERS)
④ Commutateur de filtre subsonique (SUBSONIC FILTER)
⑤ Commutateur de correction physiologique (LOUDNESS)
⑥ Commande des graves (BASS)
⑦ Commande des aiguës (TREBLE)
⑧ Commande d'équilibrage (BALANCE)
⑨ Commande de VOLUME
⑩ Commutateur de fonction (FUNCTION)
⑪ Compteur de niveau de puissance
⑫ Borne de terre (GND)
⑬ Prises d'entrée PHONE (PHONO INPUT)
⑭ Bornes d'entrée tuner (TUNER INPUT)
⑮ Bornes d'entrée AUX/TV (AUX/TV)
⑯ Prises d'enregistrement du magnétphono (TAPE REC)
⑰ Prises de reproduction du magnétphono (TAPE PLAY)
⑱ Bornes d'enceintes (SPEAKERS)
⑲ Prises C.A.
(3 prises d'alimentation sur les modèles destinés aux Etats-Unis et au Canada, 1 prise d'alimentation pour les pays d'Asie et d'Amérique Latine)
⑳ Cordon d'alimentation C.A.
㉑ Sélecteur de tension (VOLTAGE SELECTOR) (pour l'Asie et les pays d'Amérique Latine)
㉒ Support de fusible (FUSE)
(pour l'Asie et les pays d'Amérique Latine)

BLOCK DIAGRAM·BLOCK SCHEMA·SCHEMA



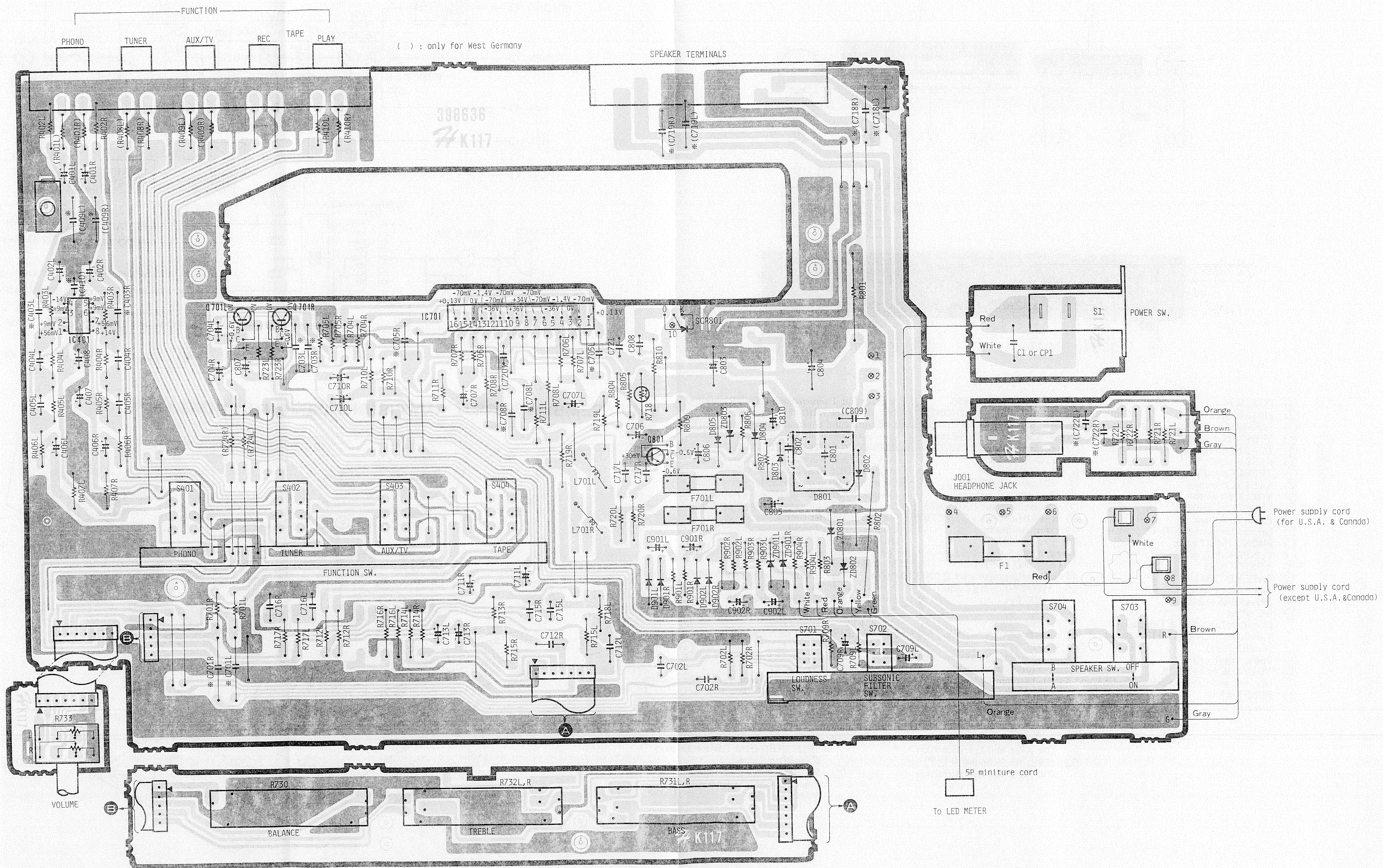
DISASSEMBLY·AUSBAUANWEISUNG·DÉMONTAGE



PRINTED WIRING BOARD·PRINTPLATTEN·PLAN DE BASE

[:Earth, :Other]

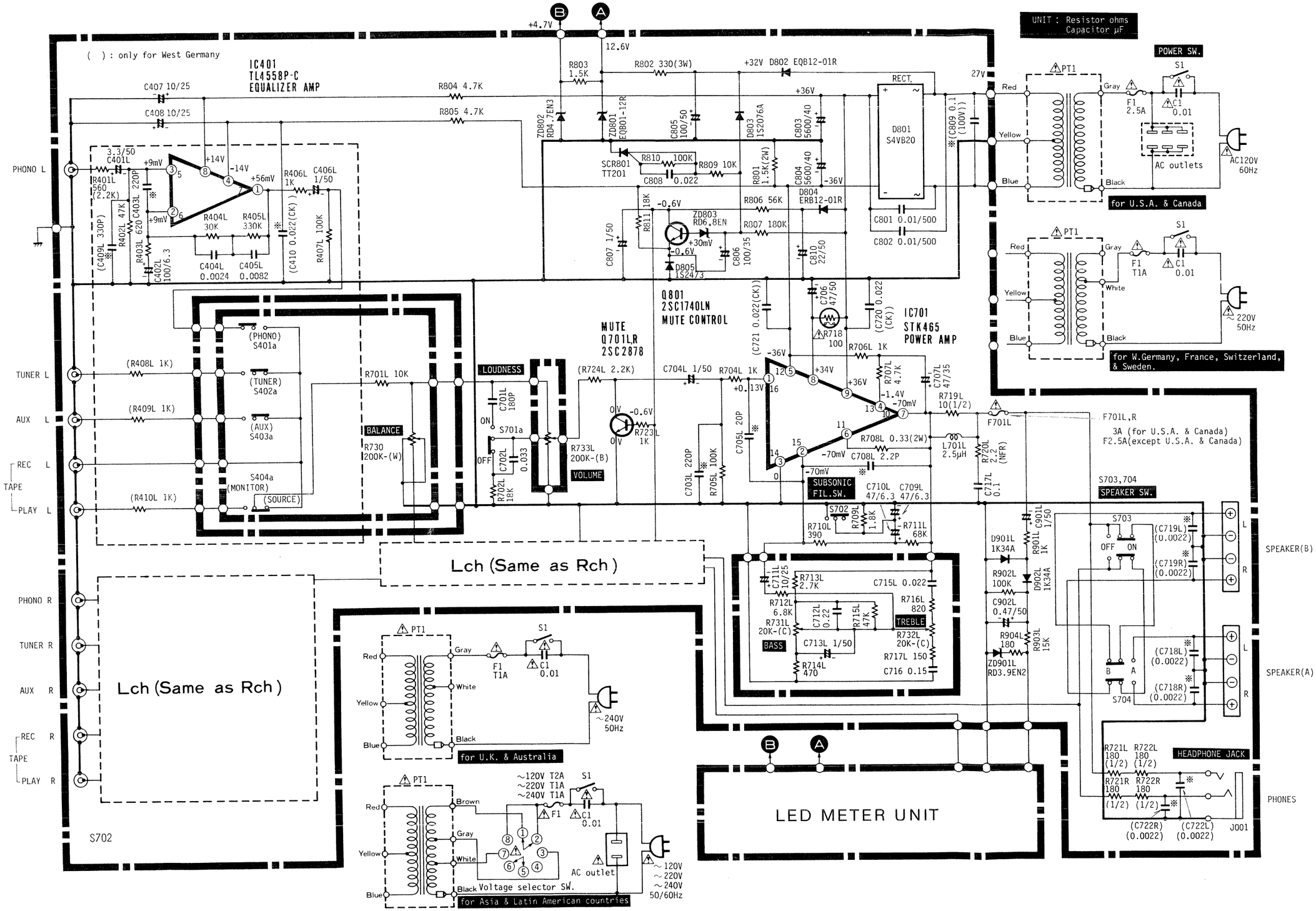
※: Axial lead cylindrical ceramic capacitor
※: Zylindrischer Keramikkondensator mit axialer Zuleitung
※: Condensateur céramique cylindrique à conducteur axial



CIRCUIT DIAGRAM·SCHALTPLAN·PLAN DE CIRCUIT

CAUTION
Use the electrolytic capacitors with explosion-proof valve when the diameter of them is more than 10mmϕ.

※: Axial lead cylindrical ceramic capacitor
※: Zylindrischer Keramikkondensator mit axialer Zuleitung
※: Condensateur céramique cylindrique à conducteur axial



REPLACEMENT PARTS LIST·ERSATZTEILLISTE·TABLEAU DES PIECE

SYMBOL NO.	PART NO.	DESCRIPTION			
CAPACITORS					
C401LR	0252813	Electrolytic	3.3μF		50V
C402LR	0252231	Electrolytic	100μF		6.3V
C403LR	0240004	Cylindrical ceramic	220pF	±10%	50V
C404LR	1274223	Mylar, film	2400pF	±5%	50V
C405LR	1274236	Mylar, film	8200pF	±5%	50V
C406LR	0252811	Electrolytic	1μF		50V
C407	0252621	Electrolytic	10μF		25V
C408	0252621	Electrolytic	10μF		25V
C409	0240006	Cylindrical ceramic (for W. Germany)	330pF	±10%	50V
C410	0244173	Cylindrical ceramic	0.022μF	+80 −20%	50V
C701LR	0240003	Cylindrical ceramic	180pF	±10%	50V
C702LR	0275014	Mylar, film	0.033μF	±10%	50V
C703LR	0240004	Cylindrical ceramic	220pF	±10%	50V
C704LR	0252811	Electrolytic	1μF		50V
C705LR	0230019	Cylindrical ceramic	20pF	±5%	50V
C706	0252825	Electrolytic	47μF		50V
C707LR	0252725	Electrolytic	47μF		35V
C708LR	0230004	Cylindrical ceramic	2.2pF	±10%	50V
C709LR	0252225	Electrolytic	47μF		6.3V
C710LR	0252225	Electrolytic	47μF		6.3V
C711LR	0252621	Electrolytic	10μF		25V
C712LR	0276013	Mylar, film	0.22μF	±10%	50V
C713LR	0257181	Electrolytic	1μF (B.P.)		50V
C715LR	0275013	Mylar, film	0.022μF	±10%	50V
C716LR	0276012	Mylar, film	0.15μF	±10%	50V
C717LR	0276011	Mylar, film	0.1μF	±10%	50V
C718LR	0240102	Cylindrical ceramic (for W. Germany)	2200pF	±30%	50V
C719LR	0240102	Cylindrical ceramic (for W. Germany)	2200pF	±30%	50V
C801	0245408	Ceramic, discal	0.01μF	±20%	500V
C802	0245408	Ceramic, discal	0.01μF	±20%	500V
⚠C803	0259933	Electrolytic	5600μF		40V
⚠C804	0259933	Electrolytic	5600μF		40V
C805	0252831	Electrolytic	100μF		50V
C806	0252731	Electrolytic	100μF		35V
C807	0252811	Electrolytic	1μF		50V
C808	0275013	Mylar, film	0.022μF	±10%	50V
C809	0276511	Mylar, film (for W. Germany)	0.1μF	±10%	100V
C810	0252822	Electrolytic	22μF		50V
C901LR	0252811	Electrolytic	1μF		50V
C902LR	0252805	Electrolytic	0.47μF		50V
⚠C1	0243899	Ceramic, discal (for U.S.A. & Canada)	0.01μF	+100 −0%	125V
⚠C1	0243901	Ceramic, discal (except U.S.A. & Canada)	0.01μF	+100 −0%	400V
RESISTORS					
R401LR	0129579	Carbon film (except W. Germany)	560Ω	±5%	SRD 1/4P
R401LR	0129609	Carbon film (for W. Germany)	2.2 kΩ	±5%	SRD 1/4P
R402LR	0129647	Carbon film	47kΩ	±5%	SRD 1/4P
R403LR	0129580	Carbon film	620Ω	±5%	SRD 1/4P
R404LR	0129642	Carbon film	30kΩ	±5%	SRD 1/4P
R405LR	0129673	Carbon film	330kΩ	±5%	SRD 1/4P
R406LR	0129601	Carbon film	1kΩ	±5%	SRD 1/4P
R407LR	0129661	Carbon film	100kΩ	±5%	SRD 1/4P
R408LR	0129601	Carbon film (for W. Germany)	1kΩ	±5%	SRD 1/4P
R409LR	0129601	Carbon film (for W. Germany)	1kΩ	±5%	SRD 1/4P
R410LR	0129601	Carbon film (for W. Germany)	1kΩ	±5%	SRD 1/4P
R701LR	0129631	Carbon film	10kΩ	±5%	SRD 1/4P
R702LR	0129637	Carbon film	18kΩ	±5%	SRD 1/4P
R704LR	0129601	Carbon film	1kΩ	±5%	SRD 1/4P
R705LR	0129661	Carbon film	100kΩ	±5%	SRD 1/4P
R706LR	0129601	Carbon film	1kΩ	±5%	SRD 1/4P
R707LR	0129617	Carbon film	4.7kΩ	±5%	SRD 1/4P
R708LR	0119125	Metal	0.33Ω	±10%	RN2B
R709LR	0129607	Carbon film	1.8kΩ	±5%	SRD 1/4P
R710LR	0129575	Carbon film	390Ω	±5%	SRD 1/4P
R711LR	0129651	Carbon film	68kΩ	±5%	SRD 1/4P
R712LR	0129621	Carbon film	6.8kΩ	±5%	SRD 1/4P
R713LR	0129611	Carbon film	2.7kΩ	±5%	SRD 1/4P
R714LR	0129577	Carbon film	470Ω	±5%	SRD 1/4P
R715LR	0129647	Carbon film	47kΩ	±5%	SRD 1/4P
R716LR	0129583	Carbon film	820Ω	±5%	SRD 1/4P
R717LR	0129565	Carbon film	150Ω	±5%	SRD 1/4P
⚠R718	0110621	Metal (fuse resistor)	100Ω	±5%	RN1/4B
R719LR	0134289	Composition (except Switzerland & France)	10Ω	±10%	RC1/2GF
⚠R719LR	1113830	Metal (fuse resistor) (for Switzerland & France)	10Ω	±5%	RN1/2B
R720LR	0100609	Metal	2.2Ω	±5%	RN1/4B
R721LR	0134364	Composition	180Ω	±10%	RC1/2GF
R722LR	0134364	Composition	180Ω	±10%	RC1/2GF
R723LR	0129601	Carbon film	1kΩ	±5%	SRD 1/4P
R801	0119543	Metal Oxide	1.5kΩ	±10%	RS2B
R802	0119627	Metal Oxide	330Ω	±10%	RS3B
R803	0129605	Carbon film	1.5kΩ	±5%	SRD 1/4P
R804	0129617	Carbon film	4.7kΩ	±5%	SRD 1/4P
R805	0129617	Carbon film	4.7kΩ	±5%	SRD 1/4P
R806	0129649	Carbon film	56kΩ	±5%	SRD 1/4P
R807	0129667	Carbon film	180kΩ	±5%	SRD 1/4P
R809	0129631	Carbon film	10kΩ	±5%	SRD 1/4P
R810	0129661	Carbon film	100kΩ	±5%	SRD 1/4P
R811	0129637	Carbon film	18kΩ	±5%	SRD 1/4P
R901LR	0129601	Carbon film	1kΩ	±5%	SRD 1/4P
R902LR	0129661	Carbon film	100kΩ	±5%	SRD 1/4P
R903LR	0129635	Carbon film	15kΩ	±5%	SRD 1/4P
R904LR	0129567	Carbon film	180Ω	±5%	SRD 1/4P
ICs & TRANSISTORS					
IC401	2369121	TL4558P-C			
IC701	2369871	STK465			
Q701LR	2317712	2SC2878			
Q801	2328656	2SC1740LN Ⓔ			
DIODES & THYRISTOR					
D801	2337461	S4VB20			
D802	2337762	ERB12-01R			
D803	2337151	1S2076A			
D804	2337762	ERB12-01R			
D805	2337601	1S2473			
D901LR	2337921	1K34A			
D902LR	2337921	1K34A			
ZD801	2337783	EQB01-12R			
ZD802	2338595	RD4.7EN3			
ZD803	2338605	RD6.8EN1			
ZD901LR	2338589	RD3.9EN2			
SCR801	2338861	Thyristor (TT201-90)			
VARIABLE RESISTOR					
R730	0166431	200kΩ-(B) (BALANCE)			
R731LR	0166441	20kΩ-(C)			
R732LR	0166441	20kΩ-(C)			
R733	0151857	200kΩ-(B) (VOLUME)			
COILS					
L701LR	2227311	Audio trap coil-2.5μH			
MISCELLANEOUS					
⚠S1	2639512	Power switch (for U.S.A. & Canada)			
⚠S1	2639513	Power switch (except U.S.A. & Canada)			
⚠F1	2727564	Fuse-2.5A, ST6 (for U.S.A. & Canada)			
⚠F1	2727191	Fuse-T1A, 250V (except U.S.A. & Canada)			
⚠F701LR	2727962	Fuse-3A, 125V (for U.S.A. & Canada)			
⚠F701LR	2727335	Fuse-F2.5A (except U.S.A. & Canada)			
J001	2677751	Headphone jack			
	2688281	Speaker terminal			
S401-404	2639665	Push switch (PHONO, TUNER, others)			
S701,702	2639362	Push switch (LOUDNESS, SUBONIC FIL.)			
S703,704	2638621	Push switch (SPEAKERS)			
	2727681	Fuse holder			
	2727161	Lamp holder			
	2677614	6P US pin jack			
	2677613	4P US pin jack			
	4567411	3φx6DT bind screw (for push SW., P.W.B., heat sink holder)			
	4784106	3φx10 bind tapping screw (for heat sink, heat sink holder)			
	4784107	3φx18 bind tapping screw (for heat sink power module)			
for REAR PLATE ASSEMBLY					
⚠	0043793	Bushing (for power supply cord) (for U.S.A. & Canada)			
⚠	3913006	Bushing (for power supply cord) (except U.S.A. & Canada)			
⚠	2749471	Power supply cord (for U.S.A. & Canada)			
⚠	2748752	Power supply cord (for Europe, Switzerland, Sweden, W. Germany, Asia & Latin American countries, etc.)			
⚠	2749582	Power supply cord (for U.K.)			
⚠	2749622	Power supply cord (for Australia)			
⚠	2658413	AC outlets (for U.S.A.)			
⚠	2658414	AC outlets (for Canada)			
⚠	2658372	AC outlet } (for Asia & Latin American countries, etc.)			
⚠	2618051	Voltage selector switch }			
	4567432	3φx8DT bind screw (for Asia & Latin American countries, etc.)			
for FINAL ASSEMBLY					
	3248492	Escutcheon			
	3291521	Knob ass'y (VOLUME)			
	4581981	3φx10 tapping flat head screw (for escutcheon) Cover ass'y (for U.S.A. & Canada)			
	4567443	4φx10DT bind screw (for cover) Cover (for U.K.)			
	4432073	Cover ass'y (except U.S.A., Canada & U.K.)			
	4567463	4φx10DT bind screw (for cover)			
for DIAL MECHANISM ASSEMBLY					
	3952701	Sub panel			
	3952791	Power indicator sheet			
	3952741	Power button			
	3952732	Button ass'y (LOUDNESS, others)			
	3293901	Push button ass'y (FUNCTION)			
	3293061	Slide button (BASS, TREBLE, BALANCE)			
	3927411	Leg			
⚠T001	2247802	Power transformer (for U.S.A.)			
⚠T001	2247805	Power transformer (for Canada)			
⚠T001	2247803	Power transformer (for Europe, Switzerland, Sweden, U.K., Australia & W. Germany)			
⚠T001	2247804	Power transformer (for Asia & Latin American countries, etc.)			
	2339361	LED level meter			
	4567411	3φx6DT bind screw (for power sw.)			
	4567413	3φx10DT bind screw (for leg, rear plate, power holder)			
	4567454	3φx12 DT bind screw (for PWB, heat sink)			
	4784106	3φx10 bind taping screw (for US pin, speaker terminal, others)			
	4567422	4φx8DT bind screw (for power trans.)			
for ACCESSORIES					
⚠	2658361	E socket adaptor } (for Asia & Latin			
⚠	2727193	Fuse T2A, 250V } American countries, etc.)			

Check that exposed parts are acceptably insulated from the supply circuit before returning the instrument repaired to the customer.

- **Checking method**

  Power switch is set to ON.
  Next, measure the resistance value between the both poles of attachment cup (Power supply plug) and the Ground terminal (GND) of rear plate and check that the resistance value is 500kohms or more.

